ELSEVIER

General Subjects

Vol. 1428, 1999

BIOCHIMICA ET BIOPHYSICA ACTA

BBA

www.elsevier.com/locate/bba

Cumulative Contents

Information for Contributors *vii*

Detection of mitochondria-derived reactive oxygen species production by the chemilumigenic probes lucigenin and luminol
Y. Li, H. Zhu and M.A. Trush (USA) 1

1-Methyladenine production from ATP by starfish ovarian follicle cells
M. Mita, M. Yoshikuni and Y. Nagahama (Japan) 13

Binding of pepsinogen to the 78 kDa gastrin binding protein
K.A. Rorison, G.M. Neumann and G.S. Baldwin (Australia) 21

New biodegradable hydrogels based on a photocrosslinkable modified polyaspartamide: synthesis and characterization
G. Giammona, G. Pitarresi, G. Cavallaro, S. Buscemi and F. Saiano (Italy) 29

Purification and characterization of an anti-(A+B) specific lectin from the mushroom *Hygrophorus hypothejus*
B. Veau, J. Guillot, M. Damez, M. Dusser, G. Konska and B. Botton (France) 39

Generation of active oxygen species from advanced glycation end-products (AGEs) during ultraviolet light A (UVA) irradiation and a possible mechanism for cell damaging
H. Masaki, Y. Okano and H. Sakurai (Japan) 45

Differential behaviour of lipid based and polycation based gene transfer systems in transfecting primary human fibroblasts: a potential role of polylysine in nuclear transport
W. Zauner, S. Brunner, M. Buschle, M. Ogris and E. Wagner (Austria) 57

Structural requirements for the binding of non-steroidal anti-inflammatory drugs to the 78 kDa gastrin binding protein
G.S. Baldwin and K.A. Rorison (Australia) 68

Isolation and characterization of a highly sulfated heparan sulfate from ascidian test cells
M.C.M. Cavalcante, P.A.S. Mourão and M.S.G. Pavão (Brazil) 77

Development of recombinant, immobilised β-1,4-mannosyltransferase for use as an efficient tool in the chemoenzymatic synthesis of *N*-linked oligosaccharides
L. Revers, R.M. Bill, I.B.H. Wilson, G.M. Watt and S.L. Flitsch (UK) 88

Single micro electrode dielectrophoretic tweezers for manipulation of suspended cells and particles
T. Schnelle, T. Müller, R. Hagedorn, A. Voigt and G. Fuhr (Germany) 99

Sialic acid-specific lectin from *Tritrichomonas foetus*
P. Babál, F.F. Pindak, L.C. Russell and W.A. Gardner Jr. (Slovakia, USA) 106

Rapid Report

Urocanic acid isomers are good hydroxyl radical scavengers: a comparative study with structural analogues and with uric acid
A. Kammeyer, T.A. Eggelte, J.D. Bos and M.B.M. Teunissen (Netherlands) 117

Information for Contributors *vii*

Comparative characterisation of Russell's viper (*Daboia/Vipera russelli*) venoms from different regions of the Indian peninsula
N.B. Prasad, B. Uma, S.K.G. Bhatt and V.T. Gowda (India) 121

Immunological determination and size characterization of poly(ADP-ribose) synthesized in vitro and in vivo
E.B. Affar, P.J. Duriez, R.G. Shah, E. Winstall, M. Germain, C. Boucher, S. Bourassa, J.B. Kirkland and G.G. Poirier (Canada) 137

Gelatinase A expression in endothelial cells is regulated by at least two *cis*-acting promoter elements
K.D. Bottles, E.C. Bullen, D.L. Updike, T.-K.H. Vu, E. Phelps, P. Grammas and E.W. Howard (USA) 147

Evidence for the interaction between Translin and GADD34 in mammalian cells
T. Hasegawa and K. Isobe (Japan) 161

Transcriptional activation of the F_1F_0 ATP synthase α-subunit initiator element by USF2 is mediated by p300
G.A.M. Breen and E.M. Jordan (USA) 169

Camouflaging endothelial cells: does it prolong graft survival?
K.M. Stuhlmeier and Y. Lin (USA) 177

The macromolecular characteristics of cartilage proteoglycans do not change when synthesis is up-regulated by link protein peptide
H. Liu, L.A. McKenna and M.F. Dean (Germany, UK) 191

Bilirubin-Cu(II) complex degrades DNA
S.F. Asad, S. Singh, A. Ahmad and S.M. Hadi (India) 201

Altered mRNA expression of glycosyltransferases in human gastric carcinomas
T. Petretti, B. Schulze, P.M. Schlag and W. Kemmner (Germany) 209

Polyamine oxidase and tissue transglutaminase activation in rat small intestine by polyamines
P. Tunici, A. Sessa, E. Rabellotti, G. Grant, S. Bardocz and A. Perin (Italy, UK) 219

Stimulation of serglycin and CD44 mRNA expression in endothelial cells exposed to TNF-α and IL-1α
M.A. Kulseth, S.O. Kolset and T. Ranheim (Norway) 225

In vivo electroporation of skeletal muscle: threshold, efficacy and relation to electric field distribution
J. Gehl, T.H. Sørensen, K. Nielsen, P. Raskmark, S.L. Nielsen, T. Skovsgaard and L.M. Mir (Denmark, France) 233

Role of 2-amino-3-carboxy-1,4-naphthoquinone, a strong growth stimulator for bifidobacteria, as an electron transfer mediator for $NAD(P)^+$ regeneration in *Bifidobacterium longum*
S. Yamazaki, K. Kano, T. Ikeda, K. Isawa and T. Kaneko (Japan) 241

Collagenase degrades collagen in vivo in the ischemic heart
S. Takahashi, D. Geenen, E. Nieves and T. Iwazumi (USA) 251

Transport of amino acids and ammonium in mycelium of *Agaricus bisporus*
M.A.S.H. Kersten, M.J.C. Arninkhof, H.J.M. Op den Camp, L.J.L.D. Van Griensven and C. van der Drift (The Netherlands) 260

Structural features and anticoagulant activities of a novel natural low molecular weight heparin from the shrimp *Penaeus brasiliensis*
C.P. Dietrich, J.F. Paiva, R.A.B. Castro, S.F. Chavante, W. Jeske, J. Fareed, P.A.J. Gorin, A. Mendes and H.B. Nader (Brazil, USA) 273

The adaptive response of MyoD family proteins in overloaded, regenerating and denervated rat muscles
K. Sakuma, K. Watanabe, M. Sano, I. Uramoto, K. Sakamoto and T. Totsuka (Japan) 284

Chemistry and biological activities of constituents from *Morus australis*
H.-H. Ko, J.-J. Wang, H.-C. Lin, J.-P. Wang and C.-N. Lin (Taiwan) 293

Comparison of bone marrow extracellular matrices
M. Lee, I.P. Christopherson, J.M. Lehman, C.J. Bennett and H.T. Cheung (USA) 300

Determination of different amino sugar 2′-epimerase activities by coupling to *N*-acetylneuraminate synthesis
L.B. Rodríguez-Aparicio, M.A. Ferrero, B. Revilla-Nuin, H. Martínez-Blanco and A. Reglero (Spain) 305

Identification of two distinct antibacterial domains within the sequence of bovine α_{s2}-casein
I. Recio and S. Visser (The Netherlands) 314

Quantitative alterations of hyaluronan and dermatan sulfate in the hairless mouse dorsal skin exposed to chronic UV irradiation
I. Koshiishi, E. Horikoshi, H. Mitani and T. Imanari (Japan) 327

Evaluation of the pulmonary and systemic immunogenicity of Fluidosomes, a fluid liposomal–tobramycin formulation for the treatment of chronic infections in lungs
S. Sachetelli, C. Beaulac, R. Riffon and J. Lagacé (Canada) 334

Taurocholate-induced inhibition of hepatic lysosomal degradation of horseradish peroxidase
M.C. Larocca, J.M. Pellegrino, E.A. Rodriguez Garay and R.A. Marinelli (Argentina) 341

Effects of ethidium bromide on DNA loop organisation in human lymphocytes measured by anomalous viscosity time dependence and single cell gel electrophoresis
I.Y. Belyaev, S. Eriksson, J. Nygren, J. Torudd and M. Harms-Ringdahl (Russia, Sweden) 348

Bcl-2 protects against FCCP-induced apoptosis and mitochondrial membrane potential depolarization in PC12 cells
G. Dispersyn, R. Nuydens, R. Connors, M. Borgers and H. Geerts (Belgium, The Netherlands, USA) 357

Active site characterization of RNase Rs from *Rhizopus stolonifer*: involvement of histidine and lysine in catalysis and carboxylate in substrate binding
S. Rangarajan, R. Chacko and V. Shankar (India) 372

The reaction of deoxy-sickle cell hemoglobin with hydroxyurea
D.B. Kim-Shapiro, S.B. King, H. Shields, C.P. Kolibash, W.L. Gravatt and S.K. Ballas (USA) 381

Chemical modification of rat hepatic microsomes with *N*-ethylmaleimide results in inactivation of both UDP-*N*-acetylglucosamine-dependent stimulation of glucuronidation and UDP-glucuronic acid uptake
S. Ikushiro, Y. Emi, S. Kimura and T. Iyanagi (Japan) 388

Developmental expression of the four plasma membrane calcium ATPase (Pmca) genes in the mouse
D.A. Zacharias and C. Kappen (USA) 397

Characterization of the genotoxicity of anthraquinones in mammalian cells
S.O. Mueller and H. Stopper (Germany) 406

A new mechanism of action of fluoride on streptococci
S.D. Cox, M.O. Lassiter, B.S. Miller and R.J. Doyle (USA) 415

Fusarium sp. growth inhibition by wheat germ agglutinin
J. Ciopraga, O. Gozia, R. Tudor, L. Brezuica and R.J. Doyle (Romania, USA) 424

A novel pentasaccharide from immunostimulant oligosaccharide fraction of buffalo milk
R. Saksena, D. Deepak, A. Khare, R. Sahai, L.M. Tripathi and V.M.L. Srivastava (India) 433

In situ analysis of sulfur in the sulfur globules of phototrophic sulfur bacteria by X-ray absorption near edge spectroscopy
A. Prange, I. Arzberger, C. Engemann, H. Modrow, O. Schumann, H.G. Trüper, R. Steudel, C. Dahl and J. Hormes (Germany) 446

Characterization of the CoA ligases of human liver mitochondria catalyzing the activation of short- and medium-chain fatty acids and xenobiotic carboxylic acids
D.A. Vessey, M. Kelley and R.S. Warren (USA) 455

Photo-modulation of horseradish peroxidase activity via covalent attachment of carboxylated-spiropyran dyes
D.G. Weston, J. Kirkham and D.C. Cullen (UK) 463

Cumulative Contents, Vol. 1428 468

Author Index 471